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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,863	11/21/2001	Ruth Meissner	Mo6761 LcA 35,018	9206

157 7590 11/19/2002

BAYER CORPORATION  
PATENT DEPARTMENT  
100 BAYER ROAD  
PITTSBURGH, PA 15205

EXAMINER

TUNG, JOYCE

ART UNIT	PAPER NUMBER
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1637

DATE MAILED: 11/19/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/988,863**

Applicant(s)  
**Meissner et al.**

Examiner  
**Joyce Tung**

Art Unit  
**1637**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-58 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claim 1, drawn to a nucleic acid sequence in accordance with SEQ ID NO: 3-5, classified in class 536, subclass 22.1.
  - II. Claims 25-39, drawn to an isolated nucleic acid sequence in accordance with SEQ ID NO:1 , classified in class 536, subclass 22.1.
  - III. Claims 40-42, drawn to an isolated polypeptide which is encoded by a nucleic acid sequence according claim 25, classified in class 530, subclass 350.
  - IV. Claims 43-44, drawn to an antibody which binds specifically to a polypeptide according claims 40-41, classified in class 530, subclass 388.1.
  - V. Claim 45, drawn to a method of generating a nucleic acid according to claim 25 by chemical synthesis, classified in class 435, subclass 6.
  - VI. Claims 46-47, drawn to a method of generating a polypeptide by tissue cell culture, classified in class 435, subclass 41.
  - VII. Claim 48, drawn to a method of finding a chemical compound which binds to a polypeptide or modulate the activity of the polypeptide, classified in class 435, subclass 244.

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- VIII. Claim 49, drawn to a method of finding a compound which modifies the expression of polypeptide, classified in class 435, subclass 244 .
- IX. Claims 50-51, drawn to an modulator which identified by claim 48, classified in class 424, subclass 78.08/600.
- X. Claims 52-53, drawn to a herbicidally active substance which is found by a method according to claims 48-49, classified in class 435, subclass 5.
- XI. Claims 54-58, drawn to an isolated nucleic acid encoding a plant phosphomevalonate kinase with exception of the nucleic acid fragments in accordance with SEQ ID NO: 3-5, classified in class 536, subclass 22.1.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions, Groups I-IV and IX-XI and V-VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product groups, Groups I-IV and IX-XI are separately drawn to nucleic acid, polypeptide, antibody and chemical compounds and these products can be used in nucleic acid purification or protein purification.

3. Inventions V-VIII are distinct because Group V, claim 45 is drawn to a method of generating a nucleic acid involving chemical synthesis and DNA amplification via PCR, Group VI, claims 46-47 are drawn to a method of generating a polypeptide by using tissue culture,

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Group VII, claim 48 is drawn to a method of finding a compound which modulates the activity of the polypeptide via tissue culture and Group VIII, claim 49 is drawn to a method of finding a compound which modifies the polypeptide expression via tissue culture. As addressed above, they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Thus, they are distinct invention.

4. Inventions I-IV and VIII-XI are distinct because Group I -II and Group XI are drawn to a nucleic acid sequence in which Group I is drawn nucleic acid encoding plant phosphomevalonate kinase with the exception of fragment in accordance of SEQ ID NO: 3-5, Group II is drawn to an isolated nucleic acid encoding plant phosphomevalonate kinase selected from the group consisting of the sequence in accordance with SEQ ID NO:1, Group XI is drawn to an isolated nucleic acid encoding plant phosphomevalonate kinase with the exception of fragment in accordance of SEQ ID NO: 3-5. Thus among the nucleic acid sequence groups, they are distinct inventions because the nucleic acid sequence encodes different sequences as set forth above.

Among Groups IX and X, Group IX is drawn to a modulator which modulates the activity of polypeptide, while Group IX is drawn to a herbicidally active substance which either modulates the activity of the polypeptide or modifies the expression of polypeptide. Thus, based upon the different function of the products, they have different chemical structures and they are distinct inventions.

In addition, Since Groups I-II and XI are drawn to nucleic acid molecules, Group II is drawn to a polypeptide, Group IV is drawn to an antibody, polypeptides and nucleic acids have

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distinct chemical structures and physical properties, the former composed of amino acids and the latter composed of nucleotides. Further, they have distinct utilities, such as use of nucleic acids in hybridization and use of proteins for enzymatic function. The antibody and polypeptide are proteins, but they have different features biologically and biochemically. Therefore, the above inventions are novel and unobvious over each other.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. A telephone call was made to Mr. Raymond J. Harmuth on 11/5/2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

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8. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

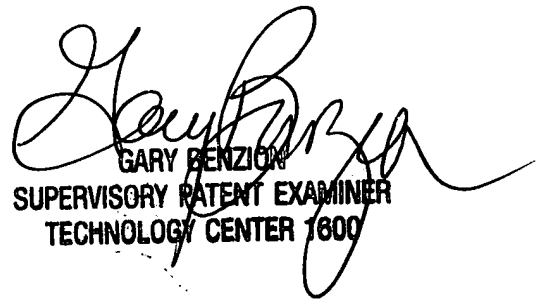
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

9.. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1637 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

November 11, 2002

  
GARY BENZION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600